

IWASAKI et al. -- 10/701,488
Attorney Docket: 008312-0306632

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of manufacturing a perpendicular magnetic recording medium, comprising forming on a nonmagnetic substrate a perpendicular magnetic layer at 280 320 to 450°C by using a magnetic layer-forming material containing ~~at least one additive component selected from the group consisting of cobalt, platinum, and at least one additive component of~~ molybdenum and tungsten, said perpendicular magnetic layer being constructed to include a plurality of magnetic crystal grains containing cobalt and platinum, which are separated from each other by crystal grain boundaries ~~and providing a perpendicular magnetic layer in which the additive component is segregated in the crystal grain boundaries.~~
2. (Currently amended) The method of manufacturing a perpendicular magnetic recording medium according to claim 1, wherein the perpendicular magnetic layer is formed at ~~300 320°C~~ 320°C to ~~400 380°C~~ 400 380°C on the nonmagnetic substrate.
3. (Original) The method of manufacturing a perpendicular magnetic recording medium according to claim 1, further comprising forming at least one underlayer having a hexagonal close-packed structure on the nonmagnetic substrate before the step of forming the perpendicular magnetic layer.
4. (Original) The method of manufacturing a perpendicular magnetic recording medium according to claim 3, wherein forming the underlayer comprises forming a second underlayer containing at least one element selected from the group consisting of nickel, niobium, tantalum, aluminum, tungsten, cobalt, carbon and titanium, and forming on the second underlayer a first underlayer containing at least one element selected from the group consisting of titanium, ruthenium, chromium, hafnium, cobalt, platinum, boron, copper, tantalum, molybdenum and tungsten.

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5. (Original) The method of manufacturing a perpendicular magnetic recording medium according to claim 3, further comprising forming a soft magnetic backing layer before forming the underlayer.

6. (Currently amended) The method of manufacturing a perpendicular magnetic recording medium according to claim 3, further comprising forming a cobalt-chromium series perpendicular recording layer after forming of the ~~perpendicular magnetic film~~ underlayer and before forming of the underlayer perpendicular magnetic layer.

7.-20. (Canceled)